

Listing of Claims

The present listing of claims supercedes and replaces all prior versions and listing of claims.

Amendment to the Claims

1. (previously presented) A pharmaceutical composition comprising one or more discrete solid orally deliverable dose units, each comprising particulate celecoxib in an amount of about 10 mg to about 1000 mg in intimate mixture with one or more pharmaceutically acceptable excipients, and having a distribution of celecoxib particle sizes such that D_{90} of the particles is less than 200 μm ; said composition exhibiting upon oral administration a relative bioavailability not less than about 50% by comparison with an orally delivered solution containing celecoxib at the same dosage rate.
2. (previously presented) The composition of Claim 1 wherein a single dose unit, upon oral administration to a fasting subject, provides a time course of blood serum concentration of celecoxib having a time to reach maximum concentration (T_{max}) not greater than about 3 h after administration.
3. (currently amended) ~~The composition of Claim 1~~ A pharmaceutical composition comprising one or more discrete solid orally deliverable dose units, each comprising particulate celecoxib in an amount of about 10 mg to about 1000 mg in intimate mixture with one or more pharmaceutically acceptable excipients, and having a distribution of celecoxib particle sizes such that D_{90} of the particles is less than 200 μm ; said composition exhibiting upon oral administration a relative bioavailability not less than about 50% by comparison with an orally delivered solution containing celecoxib at the same dosage rate wherein a single dose unit, upon oral administration to a fasting subject, provides a time course of blood serum concentration of celecoxib having a time to reach maximum concentration (T_{max}) not greater than about 1.7 h after administration.
4. (previously presented) The composition of Claim 1 wherein a single dose unit, upon oral administration to a fasting subject, provides a time course of blood serum

concentration of celecoxib having a maximum concentration (C_{max}) not less than about 200 ng/ml.

5. (previously presented) The composition of Claim 1 wherein a single dose unit, upon oral administration to a fasting subject, provides a time course of blood serum concentration of celecoxib having a maximum concentration (C_{max}) not less than about 400 ng/ml.

6. (original) The composition of Claim 1 wherein the amount of celecoxib in each dose unit is about 50 mg to about 800 mg.

7. (original) The composition of Claim 1 wherein the amount of celecoxib in each dose unit is about 75 mg to about 400 mg.

8. (original) The composition of Claim 1 wherein the amount of celecoxib in each dose unit is about 100 mg to about 200 mg.

9. (original) A composition of Claim 1 that is suitable, by oral administration to a subject of a dose unit once or twice a day, for providing therapeutically or prophylactically effective inhibition of cyclooxygenase-2.

10. (original) A composition of Claim 1 that is suitable, by oral administration to a subject of a dose unit once or twice a day, for treatment or prophylaxis of a cyclooxygenase-2 mediated condition or disorder.

11. (Canceled).

12. (previously presented) The composition of Claim 1 wherein said discrete solid dose units are selected from the group consisting of tablets, pills, hard and soft capsules, lozenges, sachets and pastilles.

13. (original) The composition of Claim 1 in a form of unit dosage capsules or tablets.

14. (currently amended) The composition of Claim 13 ~~wherein said further comprising at least one excipient(s)~~ are selected from the group consisting of pharmaceutically acceptable diluents, disintegrants, binding agents, wetting agents and lubricants.

15. (currently amended) The composition of Claim 13 ~~14~~ wherein said excipient(s) include one or more pharmaceutically acceptable diluents in a total amount of about 5% to about 99% by weight of the composition.

16. (original) The composition of Claim 15 wherein said diluents are selected from the group consisting of lactose, starch, mannitol, sorbitol, dextrose, microcrystalline cellulose, dibasic calcium phosphate, sucrose-based diluents, confectioner's sugar, monobasic calcium sulfate monohydrate, calcium sulfate dihydrate, calcium lactate trihydrate, dextrates, Celutab™, inositol, hydrolyzed cereal solids, amylose, Rexcel™, powdered cellulose, calcium carbonate, glycine and bentonite.

17. (original) The composition of Claim 15 wherein said diluents are selected from the group consisting of lactose and microcrystalline cellulose.

18. (original) The composition of Claim 15 wherein said diluents comprise lactose.

19. (currently amended) The composition of Claim 13 ~~14~~ wherein said excipients include one or more pharmaceutically acceptable disintegrants in a total amount of about 0.2% to about 30% by weight of the composition.

20. (original) The composition of Claim 19 wherein said disintegrants are selected from the group consisting of starches, sodium starch glycolate, clays, celluloses, alginates, pregelatinized corn starches, croscopolone and gums.

21. (original) The composition of Claim 19 wherein said disintegrants comprise croscarmellose sodium.

22. (currently amended) The composition of Claim ~~43~~ 14 wherein said excipients include one or more pharmaceutically acceptable binding agents in a total amount of about 0.5% to about 25% by weight of the composition.

23. (original) The composition of Claim 22 wherein said binding agents are selected from the group consisting of acacia, tragacanth, sucrose, gelatin, glucose, starch, celluloses, methylcellulose, sodium carboxymethylcellulose, alginic acid and salts thereof, magnesium aluminum silicate, polyethylene glycols, guar gum, polysaccharide acids, bentonites, polyvinylpyrrolidone, polymethacrylates, hydroxypropylmethylcellulose, hydroxypropylcellulose, ethylcellulose and pregelatinized starch.

24. (original) The composition of Claim 22 wherein said binding agents comprise polyvinylpyrrolidone.

25. (currently amended) The composition of Claim ~~43~~ 14 wherein said excipients include one or more pharmaceutically acceptable wetting agents in a total amount of about 0.25% to about 15% by weight of the composition.

26. (original) The composition of Claim 25 wherein said wetting agents comprise an anionic surfactant.

27. (original) The composition of Claim 25 wherein said wetting agents comprise sodium lauryl sulfate.

28. (currently amended) The composition of Claim ~~43~~ 14 wherein said excipients include one or more pharmaceutically acceptable lubricants in a total amount of about 0.1% to about 10% by weight of the composition.

29. (original) The composition of Claim 28 wherein said lubricants are selected from the group consisting of glyceryl behapate, stearates, stearic acid, hydrogenated vegetable oils, talc, waxes, Stearowet™, boric acid, sodium benzoate, sodium acetate,

sodium chloride, DL-leucine, polyethylene glycols, sodium oleate, sodium lauryl sulfate and magnesium lauryl sulfate.

30. (original) The composition of Claim 28 wherein said lubricants comprise magnesium stearate.

31. (original) A composition of Claim 13 comprising

- (a) one or more pharmaceutically acceptable diluents in a total amount of about 10% to about 85% by weight of the composition;
- (b) one or more pharmaceutically acceptable disintegrants in a total amount of about 0.2% to about 10% by weight of the composition; and
- (c) one or more pharmaceutically acceptable binding agents in an amount of about 0.5% to about 10% by weight of the composition.

32. (original) A composition of Claim 13 further comprising

- (d) one or more pharmaceutically acceptable wetting agents in a total amount of about 0.4% to about 10% by weight of the composition; and/or
- (e) one or more pharmaceutically acceptable lubricants in a total amount of about 0.2% to about 8% by weight of the composition.

33. (original) The composition of Claim 31 wherein said diluent(s) comprise lactose.

34. (original) The composition of Claim 31 wherein said disintegrant(s) comprise croscarmellose sodium.

35. (original) The composition of Claim 31 wherein said binding agent(s) comprise polyvinylpyrrolidone.

36. (original) The composition of Claim 32 wherein said wetting agent(s) comprise sodium lauryl sulfate.

37. (original) The composition of Claim 32 wherein said lubricants comprise magnesium stearate.

38. (original) The composition of Claim 13 wherein celecoxib is present in an amount of about 1% to about 95% by weight of the composition.
39. (original) The composition of Claim 13 wherein celecoxib is present in an amount of about 25% to about 85% by weight of the composition.
40. (original) A composition of Claim 13 comprising
- (a) about 1 to about 95 weight percent of celecoxib;
 - (b) about 5 to about 99 weight percent of lactose;
 - (c) about 2 to about 10 weight percent of croscarmellose sodium;
 - (d) about 0.5 to about 10 weight percent of polyvinylpyrrolidone;
 - (e) 0 to about 7 weight percent of sodium lauryl sulfate; and
 - (f) 0 to about 5 weight percent of magnesium stearate.
41. (original) A composition of Claim 13 comprising
- (a) about 25 to about 85 weight percent of celecoxib;
 - (b) about 5 to about 70 weight percent of lactose;
 - (c) about 0.2 to about 6 weight percent of croscarmellose sodium;
 - (d) about 0.5 to about 10 weight percent of polyvinylpyrrolidone;
 - (e) about 0.4 to about 6 weight percent of sodium lauryl sulfate; and
 - (f) about 0.2 to about 8 weight percent of magnesium stearate.
42. (original) A composition of Claim 13 comprising, in each dose unit,
- (a) about 80 to about 220 mg of celecoxib;
 - (b) about 30 to about 225 mg of lactose;
 - (c) about 0.5 to about 25 mg of croscarmellose sodium;
 - (d) about 0.5 to about 25 mg of polyvinylpyrrolidone;
 - (e) 0 to about 70 mg of microcrystalline cellulose;
 - (f) 0 to about 25 mg of sodium lauryl sulfate; and
 - (g) 0 to about 10 mg of magnesium stearate.

43. (original) A composition of Claim 13 comprising unit dosage capsules each containing

- (a) about 100 mg of celecoxib;
- (b) about 149.75 mg of lactose monohydrate;
- (c) about 2.7 mg of croscarmellose sodium;
- (d) about 6.75 mg of polyvinylpyrrolidone;
- (e) about 8.1 mg of sodium lauryl sulfate; and
- (f) about 2.7 mg of magnesium stearate.

44. (original) A composition of Claim 13 comprising unit dosage capsules each containing

- (a) about 200 mg of celecoxib;
- (b) about 49.75 mg of lactose monohydrate;
- (c) about 2.7 mg of croscarmellose sodium;
- (d) about 6.75 mg of polyvinylpyrrolidone;
- (e) about 8.1 mg of sodium lauryl sulfate; and
- (f) about 2.7 mg of magnesium stearate.

45. (original) A composition of Claim 13 comprising unit dosage tablets each containing

- (a) about 100 mg of celecoxib;
- (b) about 101.88 mg of lactose monohydrate;
- (c) about 7.5 mg of croscarmellose sodium;
- (d) about 6.25 mg of polyvinylpyrrolidone;
- (e) about 25 mg of microcrystalline cellulose;
- (f) about 7.5 mg of sodium lauryl sulfate; and
- (g) about 1.88 mg of magnesium stearate.

46. (original) A composition of Claim 13 comprising unit dosage tablets each containing

- (a) about 200 mg of celecoxib;
- (b) about 203.8 mg of lactose monohydrate;
- (c) about 15 mg of croscarmellose sodium;

- (d) about 12.5 mg of polyvinylpyrrolidone;
- (e) about 50 mg of microcrystalline cellulose;
- (f) about 15 mg of sodium lauryl sulfate; and
- (g) about 3.75 mg of magnesium stearate.

47. (original) A composition of Claim 13 comprising unit dosage capsules or tablets each providing a 100 mg or 200 mg dose of celecoxib.

48. (original) A composition of Claim 13 prepared by a process wherein the celecoxib, together with one or more excipients, is directly encapsulated or directly compressed into tablets.

49. (original) A composition of Claim 13 prepared by a process wherein the celecoxib, together with one or more excipients, is wet granulated prior to encapsulation or compression into tablets.

50. (original) A composition of Claim 13 prepared by a process wherein the celecoxib, together with one or more excipients, is dry granulated prior to encapsulation or compression into tablets.

51-71. (Canceled)

72. (original) A method of treating a medical condition or disorder in a subject where treatment with a cyclooxygenase-2 inhibitor is indicated, comprising orally administering to the subject a composition of Claim 1 once or twice a day.

73. (original) The method of Claim 72 wherein the condition or disorder is rheumatoid arthritis.

74. (original) The method of Claim 72 wherein the condition or disorder is osteoarthritis.

75. (original) The method of Claim 72 wherein the condition or disorder, or a symptom of the condition or disorder, is pain.

76–83. (Canceled)

84. (previously presented) The composition of Claim 1 exhibiting upon oral administration a relative bioavailability not less than about 70% by comparison with an orally delivered solution containing celecoxib at the same dosage rate.

85. (Canceled)

86. (previously presented) The composition of Claim 1 having a distribution of celecoxib particle sizes wherein D_{90} of the particles is less than 100 μm , in the longest dimension of said particles.

87. (previously presented) The composition of Claim 1 having a distribution of celecoxib particle sizes wherein D_{90} of the particles is less than 40 μm , in the longest dimension of said particles.

88. (previously presented) The composition of Claim 1 having a distribution of celecoxib particle sizes wherein D_{90} of the particles is less than 25 μm , in the longest dimension of said particles.

89. (previously presented) The composition of Claim 1 having a mean celecoxib particle size of about 1 μm to about 10 μm .

90. (previously presented) The composition of Claim 1 having a mean celecoxib particle size of about 5 μm to about 7 μm .

91–94. (Canceled).